

WHAT IS CLAIMED IS:

- 1                   1.       An interactive system comprising:
  - 2                   (a)       an article comprising (i) a surface having a plurality of positions and a  
3 plurality of different print elements respectively at the plurality of positions, and (ii) a  
4 plurality of substantially invisible codes respectively at the plurality of positions and  
5 associated with the plurality of positions on the surface; and  
6                   (b)       a scanning apparatus comprising (i) a stylus having an optical detector  
7 and an optical emitter, (ii) a processor coupled to the optical detector and the optical emitter,  
8 (iii) a memory unit comprising code for different audio outputs corresponding to the different  
9 print elements and code for determining the locations of the plurality of positions, the  
10 memory unit coupled to the processor, and (iv) an audio output device coupled to the  
11 processor.
- 1                   2.       The interactive system of claim 1 wherein the article is a sheet of paper  
2 or a molded plastic body.
- 1                   3.       The interactive system of claim 1 wherein the stylus further comprises  
2 a writing element.
- 1                   4.       The interactive system of claim 1 wherein the processor, the memory  
2 unit, and the audio output device are in the stylus.
- 1                   5.       The interactive system of claim 1 further comprising a platform and  
2 wherein the processor, the memory unit, and the audio output device are in the platform.
- 1                   6.       The interactive system of claim 1 wherein the article is a globe.
- 1                   7.       The interactive system of claim 1 wherein the plurality of print  
2 elements includes words and the different audio outputs comprise spelling or sounding  
3 words.
- 1                   8.       The interactive system of claim 1 wherein the plurality of codes  
2 comprise a plurality of dots that represent binary codes.
- 1                   9.       The interactive system of claim 1 wherein the different audio outputs  
2 comprise different music outputs associated with the print elements.

1                   10.     The interactive system of claim 1 wherein the different audio outputs  
2     comprise instructions for learning math.

1                   11.     A scanning apparatus for use with an article comprising (i) a surface  
2     having a plurality of positions and a plurality of different print elements respectively at the  
3     plurality of positions, and (ii) a plurality of substantially invisible codes respectively at the  
4     plurality of positions and associated with the plurality of positions on the surface, the  
5     scanning apparatus comprising:

- 6                   (a)     a stylus comprising an optical detector and an optical emitter;  
7                   (b)     a processor coupled to the optical detector and an optical emitter;  
8                   (c)     a memory unit comprising code for different audio outputs  
9     corresponding to the different print elements and code for correlating the locations of the  
10    plurality of positions with the audio outputs, the memory unit coupled to the processor; and  
11                  (d)     an audio output device coupled to the processor.

1                   12.     The scanning apparatus of claim 11 wherein the article comprises a  
2     sticker.

1                   13.     The scanning apparatus of claim 11 wherein the processor, memory  
2     unit, and the audio output device are in the stylus.

1                   14.     The scanning apparatus of claim 11 wherein the different audio outputs  
2     comprise the sounds of words, the spelling of words, or music.

1                   15.     The scanning apparatus of claim 11 further comprising a transceiver  
2     coupled to the processor.

1                   16.     The scanning apparatus of claim 11 wherein the memory unit further  
2     comprises code for asking questions, code for playing games, code for recording audio  
3     provided by the user, code for user entered data, and/or code for recognizing handwriting or  
4     printed characters.

1                    17.     A scanning apparatus for use with an article comprising a surface  
2     having a plurality of positions and a plurality of print elements respectively at the plurality of  
3     positions and a plurality of substantially invisible codes at the plurality of positions, wherein  
4     the codes relate to locations for the positions, wherein the substantially invisible codes are  
5     free of audio data, and wherein the scanning apparatus in the form of a stylus, the scanning  
6     apparatus comprising:

- 7                    (a)     an optical detector and an optical emitter;  
8                    (b)     a processor coupled to the optical detector;  
9                    (c)     a memory unit storing code for different audio outputs corresponding  
10    to the print elements, the memory unit coupled to the processor; and  
11                    (d)     an audio output device coupled to the processor.

1                    18.     A method for scanning, the method comprising:

- 2                    (a)     providing an article comprising (i) a surface having a plurality of  
3     positions and a plurality of print elements respectively at the plurality of positions, and (ii) a  
4     plurality of codes respectively at the plurality of positions and relating to locations of the  
5     plurality of positions on the surface;  
6                    (b)     scanning a first code associated with a first print element with a  
7     scanning apparatus;  
8                    (c)     receiving a first audio output corresponding to the scanned first print  
9     element;  
10                    (d)     scanning a second code associated with a second print element with the  
11    scanning apparatus; and  
12                    (e)     receiving a second audio output corresponding to the scanned second  
13    print element, wherein the second audio output is different than the first audio output.

1                    19.     The method of claim 18 wherein the first and second audio outputs  
2     comprise math instruction.

1                    20.     The method of claim 18 wherein the scanning apparatus comprises a  
2     writing element.

1                    21.     The method of claim 18 wherein the scanning apparatus comprises a  
2     speaker.

1                   22.     A method for scanning, the method comprising:  
2                   (a)     providing an article comprising (i) a surface having a plurality of  
3 positions, and (ii) a plurality of codes respectively at the plurality of positions and relating to  
4 locations of the plurality of positions on the surface;  
5                   (b)     writing a print element on the article with a writing element in a  
6 scanning apparatus;  
7                   (c)     scanning a code associated the written print element with the scanning  
8 apparatus; and  
9                   (d)     receiving an audio output corresponding to the scanned, written print  
10 element.

1                   23.     The method of claim 22 wherein the article is a sheet of paper.

1                   24.     The method of claim 22 wherein a user performs a mathematical  
2 computation when performing (b)-(d).

1                   25.     An interactive system comprising:

2                   (a)     an article comprising (i) a surface having a plurality of positions, and  
3 (ii) a plurality of substantially invisible codes respectively at the plurality of positions and  
4 associated with the plurality of positions on the surface, wherein the substantially invisible  
5 codes are free of audio data; and  
6                   (b)     a scanning apparatus comprising (i) a stylus having an optical detector  
7 and an optical emitter, (ii) a processor coupled to the optical detector and the optical emitter,  
8 (iii) a memory unit storing code for audio outputs and code for storing the locations of the  
9 plurality of positions, the memory unit coupled to the processor, and (iv) an audio output  
10 device coupled to the processor.

1                   26.     The system of claim 25 wherein the article is a sheet of paper.

1                   27.     The system of claim 25 wherein the processor, the memory unit, and  
2 the audio output device are in the stylus.

1                   28.    An interactive system comprising:  
2                   (a)    an article comprising (i) an object, and (ii) at least one sticker  
3 comprising a first substantially invisible code and a first print element, and a second  
4 substantially invisible code and a second print element, wherein the at least one sticker is on  
5 the object; and  
6                   (b)    a scanning apparatus comprising (i) a stylus having an optical detector  
7 and an optical emitter, (ii) a processor coupled to the optical detector and the optical emitter,  
8 (iii) a memory unit coupled to the processor, wherein the memory unit comprises code for an  
9 output dependent on the scanning of the first substantially invisible code and the second  
10 substantially invisible code, and (iv) an audio output device coupled to the processor.

1                   29.    The interactive system of claim 28 wherein the first print element is on  
2 a first sticker and the second print element is on a second sticker.

1                   30.    The interactive system of claim 28 wherein the output relates to  
2 numbers.

1                   31.    The interactive system of claim 28 wherein the first and second print  
2 elements are letters.

1                   32.    A method comprising:  
2                   (a)    providing an article including at least one sticker comprising a first  
3 substantially invisible code and a first print element and a second substantially invisible code  
4 and a second print element;  
5                   (b)    scanning the first substantially invisible first code;  
6                   (c)    scanning the second substantially invisible code; and  
7                   (d)    listening to audio relating to the first print element and the second print  
8 element.

1                   33.    The method of claim 32 wherein the first and second codes are in the  
2 form of dot patterns.

1                   34.    The method of claim 32 wherein the first and second print elements are  
2 letters.

3                    35.     The method of claim 32 wherein the first and second print elements are  
4   on first and second stickers.

1                    36.     The method of claim 32 wherein the first and second print elements are  
2   numbers.